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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/607,914	<b>Applicant(s)</b> HARJANTO, ANDY	
	<b>Examiner</b> Chelcie Daye	<b>Art Unit</b> 2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/05/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This action is issued in response to Application filed on June 27, 2003.
2. Claims 1-22 are pending.
3. Claims 1-22 are rejected.

### ***Drawings***

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the specification: Fig.3, item 306 and Fig.5B, item 513. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

**5. The following is a quotation of the first paragraph of 35 U.S.C. 112:**

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter "omits and identification" which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Examiner is unclear as to what steps are needed in order to "omit an identification" since the steps were not described in the specification in such a way as to reasonable enable one skilled in the art, at the time of the invention.

The dependent claims inherit the deficiencies of the independent claims; therefore the dependent claims are hereby rejected as well.

7. Claims 13 and 14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter "intermediary filter" which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Examiner is unable to properly determine applicants intended use for the feature "intermediary filter" since the steps were not described in the specification in such a way as to reasonably enable one skilled in the art, at the time of the invention.

8. To the best of the Examiner ascertain the claims have been examined.

**9. The following is a quotation of the second paragraph of 35 U.S.C. 112:**

**The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.**

10. Claims 1, 13, and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Per Claim 1, Examiner is uncertain of what the applicant regards as the "particular class and a particular property of the class", as well as "particular schema class or a particular attribute of the schema". Examiner is unclear if applicant regards particular property as being ambiguous to particular attribute. Also examiner is unclear if applicant regards particular class as being ambiguous to schema class. Lastly, applicant joins the multiple phrases together with an "and" and an "or" operator. Examiner is unsure whether to use the "and" operator, which is a definite statement, or the "or" operator, which is an indefinite statement.

Per Claims 13 and 14, Applicant recites "intermediary filter", wherein the only citation of a filter is within the code of the application. Examiner is unsure if the

given code is performing the "transmits a corresponding filtering translated access command to the repository". The disclosed limitation does not have enough permissible detail within the Specification.

11. Claim 3 recites the limitation "the format" in line 2 of claim 3. There is insufficient antecedent basis for this limitation in the claim.
12. As a result, examiner interprets and reviews claims as seen below.

***Claim Rejections - 35 USC § 102***

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. **Claims 1-4,6-11, and 15-18, are rejected under 35 U.S.C. 102(b) as being anticipated by Ferguson (US Patent No. 6,016,499).**

Regarding Claim 1, Ferguson discloses a method providing access to a data repository from an application, wherein data resident in the repository is organized via a schema defining at least one schema class having therein at least one attribute, the method comprising:

receiving from the application an access command<sup>1</sup> (column 9, lines 15-19, Ferguson), wherein the access command identifies a particular class and a particular property of the class (column 8, lines 3-11, Ferguson), and;

transmitting the translated access command to the repository to obtain access to the repository (column 10, lines 50-64, Ferguson).

Regarding Claim 2, Ferguson discloses a method wherein the step of translating the access command to a translated access command comprises: reading a mapping that identifies the particular property of the class (Fig. 3, Ferguson) and links the particular property of the class to the particular attribute of the schema (column 7, lines 53-57, Ferguson).

Regarding Claim 3, Ferguson discloses a method wherein the step of translating the access command to a translated access command further comprises altering the format of the command (alter is a synonym for translate; See Merriam-Webster Dictionary) such that the format of the translated access

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<sup>1</sup>Access command corresponds to either database calls or database language statement.

command is a format that the repository is capable of processing to grant access to the repository (column 9, lines 15-24, Ferguson).

Regarding Claim 4, Ferguson discloses a method wherein the step of translating the access command to a translated access command further comprises employing an application programming interface (column 7, lines 5-9, Ferguson).

Regarding Claim 6, Ferguson discloses a method wherein the repository is an LDAP-compliant directory service (Fig. 5, item 48; column 8, lines 62-66, Ferguson), and wherein the schema is in accordance with the LDAP protocol (column 9, lines 1-3, Ferguson).

Regarding Claim 7, Ferguson discloses a method wherein the repository is an LDAP-non-compliant<sup>2</sup> repository (column 8, lines 44-48, Ferguson), and wherein the schema is implicit (column 7, lines 15-17, Ferguson).

Regarding Claim 8, Ferguson discloses a method comprising extracting the implicit schema and recording it as an express schema (column 7, lines 15-17, Ferguson).



Regarding Claim 9, Ferguson discloses a method comprising:

receiving a response from the repository pursuant to transmitting the translated access command to the repository (column 9, lines 37-41, Ferguson), wherein the received response identifies the particular schema class and particular attribute of the schema (column 9, lines 48-57, Ferguson), and

fulfilling the access command received from the application by transmitting the translated response to the application (column 10, lines 50-64, Ferguson).

Regarding Claims 10 and 11, Ferguson discloses a computer-readable medium having stored thereon computer-executable instructions (column 6, lines 63-67, Ferguson).

Regarding Claim 15, Ferguson discloses a method wherein the access command is selected from the group consisting of a read command (column 9, lines 15-24, Ferguson), a write command, and a search command.

Regarding Claim 16, Ferguson discloses a directory interface for facilitating simplified access by an application to a repository wherein data is organized in accordance with a schema having at least one attribute, the directory interface comprising:

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<sup>2</sup> Examiner interprets non-compliant to mean "not", therefore by the database being ODBC-compliant it is not an LDAP rendering it non-compliant.

an application interface (Fig.2, item 46; column 7, lines 3-9, Ferguson) for receiving from the application an access command (columns 7-8, lines 66-67 and 1-3, respectively, Ferguson) and

a repository interface (Fig.2, item 48; column 1, lines 12-16, Ferguson) for transmitting a translated access command to the repository (column 10, lines 50-64, Ferguson), wherein the translated access command is derived from the access command (column 8, lines 44-48, Ferguson) and includes an identification of the at least one attribute (Fig.2, item 54; column 7, lines 11-14, Ferguson), and for receiving a repository response from which the translated repository response is derived (column 9, lines 37-41, Ferguson), wherein the repository response also includes an identification of the at least one attribute (column 9, lines 48-57, Ferguson).

Regarding Claim 17, Ferguson discloses a directory interface wherein the repository interface comprises an application programming interface (column 7, lines 3-11, Ferguson).

Regarding Claim 18, Ferguson discloses a directory interface wherein the repository is LDAP-compliant and wherein the application programming interface of the repository interface comprises an LDAP API (column 8, lines 62-67, Ferguson).

***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**16. Claims 5,12, and 19-21, are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferguson (US Patent No. 6,016,499) as applied to claims 1-4,6-11, and 15-18 above, and further in view of Srinivasan (US Patent No. 6,587,856).**

Regarding Claim 5, Ferguson discloses a method of reading the mapping that identifies the particular property of the class (Fig. 3, Ferguson) and links the particular property of the class to the particular attribute of the schema (column 7, lines 53-57, Ferguson). However, Ferguson does not explicitly disclose where the particular class is defined by a class definition having therein a definition of the particular property, and at least one metadata tag associated with the definition of the particular property, and wherein comprises reading the definition of the particular property and the associated metadata tag. On the other hand, Srinivasan discloses where the particular class is defined by a class definition (column 8, lines 45-51, Srinivasan) having therein a definition of the particular property (column 8, lines 31-36, Srinivasan), and at least one metadata tag associated with the definition of the particular property (column 7, lines 4-9,

Srinivasan), and wherein comprises reading the definition of the particular property and the associated metadata tag (column 7, lines 16-20, Srinivasan). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Srinivasan's teachings into the Ferguson system. A skilled artisan would have been motivated to combine in order to guarantee that all of the associated information was properly retrieved. Allowing a class to have a definition, which has its attributes definitions connected, assures that the metadata, which is associated with both the class and attributes are linked accordingly. As a result, this leads to a more productive and accurate system.

Regarding Claim 12, the combination of Ferguson in view of Srinivasan, discloses a computer-readable medium having stored thereon computer-executable instructions (column 6, lines 63-67, Ferguson).

Regarding Claim 19, the combination of Ferguson in view of Srinivasan, discloses a computer-readable medium having thereon a computer-readable data structure (column 16, lines 49-51, Srinivasan) defining a class definition, wherein the class definition comprises: a definition of a class (column 8, lines 45-51, Srinivasan) including a definition of at least one property of the class (column 8, lines 31-36, Srinivasan); and metadata associated with the definition of at least one property of the class (column 7, lines 4-9, Srinivasan), wherein the metadata identifies an attribute of a directory schema (column 6, lines 35-40, Srinivasan).

Regarding Claim 20, the combination of Ferguson in view of Srinivasan discloses a computer-readable medium wherein the definition of the class comprises a plurality of definitions of a respective plurality of properties of the class (column 7, lines 40-43, Srinivasan), and wherein the metadata comprises metadata associated with each of the plurality of definitions (column 7, lines 4-9, Srinivasan; wherein the "subschema entries that define system metadata for attributes" are interpreted as an attribute meaning information about an object (i.e. data about data) and since the metadata is data about the attribute and the attribute is data about the object, that is a representation of "metadata comprising metadata").

Regarding Claim 21, the combination of Ferguson in view of Srinivasan discloses a computer-readable medium wherein metadata associated with a first of the plurality of definitions identifies an attribute of a first schema class within the directory schema (Fig.5, items 416,418,420,422,423,and 446; column 5, lines 44-47, Srinivasan) and metadata associated with a second of the plurality of definitions identifies an attribute of a second schema class within the directory schema (Fig.5, items 502,504,506,508,509,510,512,and 514; column 6, lines 65-67, Srinivasan).

**17. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ferguson (US Patent No. 6,016,499) in view of Glebov (US Patent No. 6,343,265).**

Regarding Claim 22, Ferguson discloses a mapping tool embodied on a computer-readable medium for associating a property of a class with an attribute of a schema class of a repository schema, the mapping tool comprising:

computer-executable instructions (column 6, lines 63-67, Ferguson).

However, Ferguson does not explicitly disclose wherein the computer-executable instructions are for

presenting a first graphical user interface for user-selection of a selected class to be mapped to a selected schema class and for receiving a user selection of the selected class and the selected schema class;

presenting a second graphical user interface for user-selection of a selected property of the selected class and a selected attribute of the selected schema class and for receiving a user selection of the selected property and the selected attribute; and

annotating a definition of the selected class with metadata associating the selected property with the selected attribute in response to receiving a user selection of the selected property and the selected attribute. On the other hand, Glebov discloses wherein the computer-executable instructions are for presenting a first graphical user interface (Fig. 5, Glebov) for user-selection of a selected class to be mapped to a selected schema class (columns 7-8, lines 65-

67 and 1-2, respectively, Glebov) and for receiving a user selection of the selected class and the selected schema class (column 8, lines 7-10, Glebov); for presenting a second graphical user interface for user-selection of a selected property of the selected class and a selected attribute of the selected schema class (column 8, lines 2-4, Glebov) and for receiving a user selection of the selected property and the selected attribute (column 8, lines 7-10, Glebov); and for annotating a definition of the selected class with metadata (column 4, lines 51-54, Glebov) associating the selected property with the selected attribute (column 4, lines 60-62, Glebov) in response to receiving a user selection of the selected property and the selected attribute (column 8, lines 7-10, Glebov). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Srinivasan's teachings into the Ferguson system. A skilled artisan would have been motivated to do so in order to permit the user to be in charge of selecting a class as well as an attribute they wish to retrieve. As a result, the user determines what information is gathered and what information is delivered for the end result.

***Other Prior Art Made of Record***

1. Parvathaneny et al. (US Patent No. 5,829,006) discloses an object-relational database gateway for use in a computing environment having a relational database

management system (RDBMS) is disclosed. Object-oriented objects in the computing environment conform to a class inheritance hierarchy defined by an object-oriented schema.

### ***Points of Contact***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chelcie Daye whose telephone number is 571-272-3891. The examiner can normally be reached on M-F, 7:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chelcie Daye

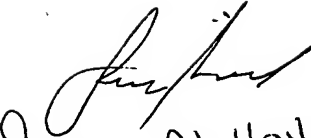


Application/Control Number: 10/607,914

Page 16

Art Unit: 2161

Patent Examiner  
Technology Center 2100  
December 16, 2005

  
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